

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-154344

(43)Date of publication of application : 16.06.1995

(51)Int.Cl.

H04B 14/06

H03D 3/00

(21)Application number : 06-217629

(71)Applicant : NOKIA MOBILE PHONES LTD

(22)Date of filing : 12.09.1994

(72)Inventor : HULKKO JAAKKO
KONTAS VEIJO
SIREN LAURI

(30)Priority

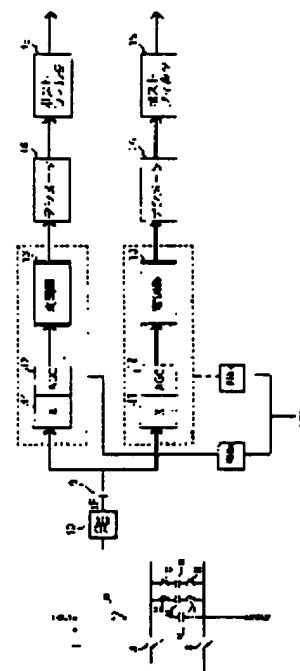
Priority number : 93 933989 Priority date : 10.09.1993 Priority country : FI

(54) RECEIVER FOR RECEIVING MODULATED CARRIER SIGNAL AND IQ MIXER/DEMODULATOR USING ITS RECEIVING CONSTITUTION

(57)Abstract:

PURPOSE: To reduce the space, cost, and power consumption of a receiver by down-converting carrier frequency signals by using a temporally discrete sample extracting means.

CONSTITUTION: A receiver uses a sigma/delta analog/digital modulator having a wide dynamic input range and a mixer 11 in the modulator is constituted by using change-over capacitor switching elements 30-39. The elements 30-39 are driven by local oscillation signals LO1 of rectangular waves having a frequency which is equal or close to that of IF signals and give the mixer 11 a mixing function. An automatic gain controller 12 is also constituted of change-over switching elements. Consequently, the switch 31 functions as the mixer 11 and IF signals and their multiple signals are held at a fundamental frequency. Therefore, the need of a sine wave oscillator is eliminated.

**LEGAL STATUS**

[Date of request for examination]

17.08.2001

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office